

MULTIPLE INTELLIGENCES IN THE CLASSROOM

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THE BASIC THEORY—Howard Gardner

"I'm not in favor of tests that are designed to measure people's intelligence, because frankly I don't care what intelligence or intelligences people have. I care whether they can do things which we value in our culture. What good is it to know if you have an IQ of 90 or 110—or even if you can jack it up to 120 through a lot of training—if, in the end, you can't do anything?"

I think our assessments ought to focus on the kinds of things we want people to understand, and they ought to give people a chance to perform their understandings. Because, at the end of the day, it doesn't matter if you have an IQ of 160 if you sit around and do nothing. What's important is whatever IQ you have or whatever profile of intelligences you have, that you can demonstrate knowledge and understanding of things that matter."

In a nutshell:

- *Linguistic* (able to use language fluently, a poet or orator)
- *Logical-mathematical* (able to work well with logic or numbers, a computer programmer or stock analyst)
- *Musical* (able to appreciate music in all forms, a musician or composer)
- *Bodily-kinesthetic* (able to skillfully use small-motor and large-motor muscles, a shortstop or surgeon)
- *Spatial* (able to creatively infer or depict visual aspects and relationships, an artist or architect)
- *Naturalist* (able to accurately categorize and classify things found in nature, a gardener or veterinarian)
- *Interpersonal* (able to read people and understand relationships, a salesperson or teacher)
- *Intrapersonal* (able to understand oneself and know how to use one's talents, a counselor)
- *Existential* (Individuals who exhibit the proclivity to pose and ponder questions about life, death, and ultimate)

Naturalistic Intelligence (Nature Smarts)

- Has a strong affinity to the outside world, to the beauty in nature, or to animals
- Enjoys subjects, shows, or stories that deal with animals or natural phenomena
- May show unusual interest in subjects like biology, zoology, botany, geology, meteorology or astronomy
- Is keenly aware of his/her surroundings and changes in the environment
- Has highly developed senses that help him/her notice similarities, differences and changes in his/her surroundings
- May be able to categorize or catalogue things easily
- May notice things others might not be aware of
- Likes to collect, classify, or read about things from nature — rocks, fossils, butterflies, feathers, shells, and the like

ACTIVITIES

- prefers to be outside
- camping
- hiking
- scuba diving
- bird watching
- gardening
- climbing
- likes sitting quietly and noticing the subtle differences

Intrapersonal Intelligence (Self Smarts)

- Displays a sense of independence or strong will
- Has a realistic sense of his/her strengths and weaknesses
- Does well when left alone to play or study
- Marches to the beat of a different drummer in his/her style of living and learning
- Has an interest or hobby that he or she doesn't talk about much
- Has a good sense of self-direction
- Prefers working alone to working with others
- Accurately expresses how he/she is feeling
- Is able to learn from his/her failures and successes
- Has high self-esteem

ACTIVITIES

- set and pursue a goal
- independent study
- describe one of your personal values
- assess your own work
- self-paced instruction
- individualized projects and games
- private spaces for study
- one-minute reflection periods
- interest centers
- personal connections
- options for homework
- choice time
- self-teaching programmed instruction
- exposure to inspirational/ motivational curricula
- self-esteem activities
- journal keeping
- goal setting sessions

Interpersonal Intelligence (People Smart)

- Enjoys socializing with peers
- Seems to be a natural leader
- Gives advice to friends who have problems
- Seems to be people smart -- attuned to others
- Belongs to clubs, committees, or other organizations
- Enjoys informally teaching other kids
- Likes to play games with other kids
- Has two or more close friends
- Has a good sense of empathy or concern for others
- Others seek out his/her company

ACTIVITIES

- cooperative groups
- interpersonal interaction
- conflict mediation
- peer teaching
- board games
- cross-age tutoring
- group brainstorming sessions
- peer sharing
- community involvement
- apprenticeships
- simulations
- academic clubs
- interactive software
- parties / social gatherings as context for learning

Bodily-Kinesthetic Intelligence (Body Smart)

- Excels in one or more sports
- Moves, twitches, taps, fidgets while seated for a long time in one spot
- Cleverly mimics other people's gestures and mannerisms
- Loves to take things apart and put them back together again
- Has trouble keeping his/her hands off something new that they have just seen
- Enjoys jumping, wrestling, or similar activities
- Shows skill on a craft or good fine-motor coordination in other ways
- Has dramatic way of expressing him/herself
- Reports different physical sensations while thinking or working
- Enjoys working with clay or other tactile medium, and enjoys hands on art activities

ACTIVITIES

- creative movement, mime
- field trips
- competitive and cooperative games
- physical awareness and relaxation exercises
- all hands-on activities
- crafts
- use of kinesthetic imagery
- cooking, gardening, and other "messy" activities
- manipulatives—objects you use to learn with
- virtual reality software
- kinesthetic concepts
- physical education activities
- communicating with body language/hand signals
- tactile materials and experiences
- body answers

Linguistic Intelligence - (Word Smart)

- Writes better than average for their age
- Spins tales and tells jokes and stories
- Has a good memory for names, places, dates, and trivia
- Enjoys word games
- Spells words accurately
- Appreciates nonsense rhymes, puns, tongue twisters, etc.
- Enjoys listening to the spoken word
- Has a good vocabulary for his/her age
- Communicates to others in a highly verbal way

ACTIVITIES

- lectures, debates
- large- and small-group discussions
- books, worksheets, manuals
- brainstorming
- writing activities
- word games
- sharing time
- storytelling, speeches, reading to class
- talking books and cassettes
- extemporaneous speaking
- journal keeping
- choral reading
- individualized reading
- memorizing linguistic facts
- tape recording one's words
- using word processors
- publishing (e.g., creating class newspapers)

Logical-Mathematical Intelligence - (Number Smart)

- Asks a lot of questions about how things work
- Computes arithmetic questions in his/her head quickly
- Enjoys the challenges of math class
- Finds math games and math computer games interesting
- Enjoys playing chess, checkers, or other strategy games
- Enjoys working with logic puzzles and brainteasers
- Likes to experiment in a way that shows higher order thinking processes
- Thinks on a more abstract levels than peers
- Has a good sense of cause and effect relationships for his/her age

ACTIVITIES

- mathematical problems on the board
- translate into a mathematical formula
- design and conduct an experiment
- make up analogies to explain
- describe the patterns or symmetry in
- Socratic questioning-- This type of questioning fosters critical thinking, evaluation, and knowledge application in students
- scientific demonstrations
- logical problem-solving exercises
- creating codes
- logic puzzles and games
- classifications and categorizations
- quantifications and calculations
- computer programming languages
- science thinking
- logical-sequential presentation of subject matter
- solving one piece at a time to get to the whole

Musical Intelligence -(Music Smart)

- Tells you when music is off-key or disturbing in some other way
- Remembers the melody of songs
- Has a good singing voice
- Plays a musical instrument or sings in a choir or other musical group
- Has a rhythmic way of speaking and/or moving
- Unconsciously hums to him/herself
- Taps rhythmically on the table or desk as he/she works
- Is sensitive to the environmental noises, like rain on the roof
- Can easily imitate the voices and inflections of others

ACTIVITIES

- musical concepts
- singing, humming, whistling
- playing recorded music
- playing live music on piano, guitar, or other instruments
- group singing
- mood music
- music appreciation
- playing percussion instruments
- rhythms, songs, raps, chants
- using background music
- linking old tunes with concepts
- creating new melodies for concepts
- music software

Spatial/Visual Intelligence - (Picture Smart)

- Reports clear visual images
- Reads maps, charts, and diagrams more easily than text
- Daydreams more than peers
- Enjoys art activities
- Draws figures and pictures that are advanced for age
- Likes to view movies, slides, or other visual presentations
- Enjoys doing puzzles, mazes, "Where's Waldo?" or "hidden picture" or "I spy" - types activities, and challenges like hidden pictures or similar games
- Builds interesting three-dimensional constructions for age (Legos)
- Gets more out of pictures than words when reading
- Doodles on workbooks, worksheets, or other materials

ACTIVITIES

- charts, graphs, diagrams, and maps
- visualization
- photography
- videos, slides, and movies
- visual puzzles and mazes
- 3-D construction kits
- art appreciation
- imaginative storytelling
- picture metaphors
- creative daydreaming
- painting, collage, visual arts
- visual thinking exercises
- using mind-maps and other visual organizers
- computer graphics software
- visual awareness activities
- optical illusions
- color cues
- telescopes, microscopes, and binoculars
- visual awareness activities
- draw-and-paint/computer- assisted- design software
- idea sketching
- graphic symbols

Existential Intelligence

- The ability to be sensitive to, or have the capacity for, conceptualizing or tackling deeper or larger questions about human existence, such as the meaning of life, why are we born, why do we die, what is consciousness, or how did we get here.
- "Wondering smart, cosmic smart, spiritually smart, or metaphysical intelligence".
- Someone who is concerned with fundamental questions about existence, or who questions the intricacies of existence
- Individuals who exhibit the proclivity to pose and ponder questions about life, death, and ultimate realities
- Children who appear to have "old souls," it is often easy to accept the existence of existential intelligence as something very real and important. These are the children who appear to have a sixth sense, they may be psychic, or ones who pose, and sometimes even answer, life's larger questions. Like: Why am I (we) here? Are there other dimensions, and if so, what are they like? Can animals understand us, or do animals go to Heaven? Are there really ghosts? Where do we go when we die? Why are some people evil? Is there life on other planets? Where is Heaven? Does God live?

ACTIVITIES

- Critical thinking exercises
- Discussion
- Journaling
- Reading

- Role Plays
- Art

Multiple Intelligences Survey

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<http://surfaquarium.com/MI/inventory.htm>

Complete each section by placing a "1" next to each statement you feel accurately describes you. If you do not identify with a statement, leave the space provided blank. Then total the column in each section.

Section 1

- _____ I enjoy categorizing things by common traits
- _____ Ecological issues are important to me
- _____ Hiking and camping are enjoyable activities
- _____ I enjoy working on a garden
- _____ I believe preserving our National Parks is important
- _____ Putting things in hierarchies makes sense to me
- _____ Animals are important in my life
- _____ My home has a recycling system in place
- _____ I enjoy studying biology, botany and/or zoology
- _____ I spend a great deal of time outdoors
- _____ TOTAL for Section 1

Section 2

- _____ I easily pick up on patterns
- _____ I focus in on noise and sounds
- _____ Moving to a beat is easy for me
- _____ I've always been interested in playing an instrument
- _____ The cadence of poetry intrigues me
- _____ I remember things by putting them in a rhyme
- _____ Concentration is difficult while listening to a radio or television
- _____ I enjoy many kinds of music
- _____ Musicals are more interesting than dramatic plays
- _____ Remembering song lyrics is easy for me
- _____ TOTAL for Section 2

Section 3

- _____ I keep my things neat and orderly
- _____ Step-by-step directions are a big help
- _____ Solving problems comes easily to me
- _____ I get easily frustrated with disorganized people
- _____ I can complete calculations quickly in my head
- _____ Puzzles requiring reasoning are fun
- _____ I can't begin an assignment until all my questions are answered
- _____ Structure helps me be successful
- _____ I find working on a computer spreadsheet or database rewarding
- _____ Things have to make sense to me or I am dissatisfied
- _____ TOTAL for Section 3

Section 4

- _____ It is important to see my role in the "big picture" of things
- _____ I enjoy discussing questions about life
- _____ Religion is important to me
- _____ I enjoy viewing art masterpieces
- _____ Relaxation and meditation exercises are rewarding
- _____ I like visiting breathtaking sites in nature
- _____ I enjoy reading ancient and modern philosophers
- _____ Learning new things is easier when I understand their value
- _____ I wonder if there are other forms of intelligent life in the universe
- _____ Studying history and ancient culture helps give me perspective
- _____ TOTAL for Section 4

Section 5

- _____ I learn best interacting with others
- _____ The more the merrier

- _____ Study groups are very productive for me
- _____ I enjoy chat rooms
- _____ Participating in politics is important
- _____ Television and radio talk shows are enjoyable
- _____ I am a "team player"
- _____ I dislike working alone
- _____ Clubs and extracurricular activities are fun
- _____ I pay attention to social issues and causes
- _____ TOTAL for Section 5

Section 6

- _____ I enjoy making things with my hands
- _____ Sitting still for long periods of time is difficult for me
- _____ I enjoy outdoor games and sports
- _____ I value non-verbal communication such as sign language
- _____ A fit body is important for a fit mind
- _____ Arts and crafts are enjoyable pastimes
- _____ Expression through dance is beautiful
- _____ I like working with tools
- _____ I live an active lifestyle
- _____ I learn by doing
- _____ TOTAL for Section 6

Section 7

- _____ I enjoy reading all kinds of materials
- _____ Taking notes helps me remember and understand
- _____ I faithfully contact friends through letters and/or e-mail
- _____ It is easy for me to explain my ideas to others
- _____ I keep a journal
- _____ Word puzzles like crosswords and jumbles are fun
- _____ I write for pleasure
- _____ I enjoy playing with words like puns, anagrams and spoonerisms
- _____ Foreign languages interest me
- _____ Debates and public speaking are activities I like to participate in
- _____ TOTAL for Section 7

Section 8

- _____ I am keenly aware of my moral beliefs
- _____ I learn best when I have an emotional attachment to the subject
- _____ Fairness is important to me
- _____ My attitude affects how I learn
- _____ Social justice issues concern me
- _____ Working alone can be just as productive as working in a group
- _____ I need to know why I should do something before I agree to do it
- _____ When I believe in something I will give 100% effort to it
- _____ I like to be involved in causes that help others
- _____ I am willing to protest or sign a petition to right a wrong
- _____ TOTAL for Section 8

Section 9

- _____ I can imagine ideas in my mind
- _____ Rearranging a room is fun for me
- _____ I enjoy creating art using varied media
- _____ I remember well using graphic organizers
- _____ Performance art can be very gratifying
- _____ Spreadsheets are great for making charts, graphs and tables
- _____ Three dimensional puzzles bring me much enjoyment
- _____ Music videos are very stimulating
- _____ I can recall things in mental pictures
- _____ I am good at reading maps and blueprints
- _____ TOTAL for Section 9

Now determine your intelligence profile!

Section 1 – This reflects your **Naturalist** strength

Section 2 – This suggests your **Musical** strength

Section 3 – This indicates your **Logical** strength

Section 4 – This illustrates your **Existential** strength

Section 5 – This shows your **Interpersonal** strength

Section 6 – This tells your **Kinesthetic** strength

Section 7 – This indicates your **Verbal** strength

Section 8 – This reflects your **Intrapersonal** strength

Section 9 – This suggests your **Visual** strength

Remember:

- ⌚ Everyone has all the intelligences!
- ⌚ You can strengthen an intelligence!
- ⌚ This inventory is meant as a snapshot in time – it can change! ⌚ M.I. is meant to empower, not label people!

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Additional Multiple Intelligence Surveys

http://www.spannj.org/BasicRights/appendix_b.htm#top

http://www.bbc.co.uk/science/leonardo/thinker_quiz/--Must be done on-line

An overview of Multiple Intelligence Theory

<http://eduscapes.com/tap/topic68.htm>

MI Go To School: Educational Implications of the Theory of Multiple Intelligences—(technical article)

<http://www.edc.org/CCT/ccthome/reports/tr4.html>

Multiple Intelligences—Articles, Recommended Reading, Related Links—(great resources)

http://home.blarg.net/~building/strategies/mi/front_mi.htm

Multiple Intelligences—Overview

<http://www.thirteen.org/edonline/concept2class/month1/>

Multiple Intelligences Inventory (Excellent!!!)

http://www.spannj.org/BasicRights/appendix_b.htm#top

Eight Ways of Knowing! (tons of practical information)

http://www.multi-intell.com/MI_chart.html

Application of Multiple Intelligences Research in Alternative Assessment

<http://www.ncela.gwu.edu/pubs/symposia/second/vol1/application.htm>

Writing Lesson Plans with MI

<http://www.huntington.edu/education/lessonplanning/Gardner.html>

Walter McKenzie's Multiple Intelligence Pages (Formats for Lesson Plan, Unit Plan, Project Plan)

<http://surfaquarium.com/MI/>